

## Six Further New Butterflies from Southern Africa

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(Continued from Volume 91, page 302)

## LYCAENIDAE

*Stugeta subinfuscata* Grünberg, 1910. *Denkschr. med.-naturw. Ges. Jena* 16: 107, pl. 3, fig. 3. [Type-locality: Windhuk (sic), two females (Lindt).]

*Stugeta subinfuscata subinfuscata* Grünberg **stat. nov.**

Although treated originally as a separate species, this taxon has for many years been regarded by various workers as a race of *Stugeta bowkeri* (Trimen) — or has at times been subjected to an even lower status. Thanks, essentially to Mr. W. H. Henning having drawn attention to the matter and having provided good grounds for regarding this insect as a distinct species, its original status is now recognised by the present writer, in this paper — and after a further detailed comparison, including the male genitalia, with specimens of *Stugeta bowkeri bowkeri*. The characters given in the original description serve to separate it convincingly from the last named taxon and, in the writer's opinion, the valves of the male genitalia confirm its specific status — the characteristic features of the valves being as referred to in the description of the race of this insect which appears later in this paper.

**Three new members of the *Stugeta bowkeri* (Trimen) group**

The first of these insects, from Little Namaqualand, has been known for more than a century, Trimén having received

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## LEGEND OF FIGURES

*Stugeta subinfuscata reynoldsi* subsp. nov.: fig. 1. ♂ holotype (upperside); fig. 2. ♂ holotype (underside); fig. 3. ♀ allotype (upperside); fig. 4. ♀ allotype (underside). *Stugeta bowkeri henningi* subsp. nov.: fig. 5. ♂ holotype (upperside); fig. 6. ♂ holotype (underside); fig. 7. ♀ allotype (upperside); fig. 8. ♀ allotype (underside). *Stugeta bowkeri teari* subsp. nov.: fig. 9. ♂ holotype (upperside); fig. 10. ♂ holotype (underside); fig. 11. ♀ allotype (upperside); fig. 12. ♀ allotype (underside). *Poecilmitis wykehami* spec. nov.: fig. 13. ♂ holotype (upperside); fig. 14. ♂ holotype (underside); fig. 15. ♀ allotype (upperside); fig. 16. ♀ allotype (underside). *Trimenia macmasteri mijburghii* subsp. nov.: fig. 17. ♂ holotype (upperside); ♂ holotype (underside); fig. 19. ♀ allotype (upperside); fig. 20. ♀ allotype (underside).

Figures approximately 0.84 times natural size.

(Colour reproduction by Unifoto (Pty.), Ltd., Cape Town.)

a female specimen which was caught by G. A. Reynolds at "Springbokfontein" in 1873; this example being referred to by Trimen in *S.A. Butt.* 2: 133, and described (but not named separately) by him on the page mentioned as an "Aberration (or Variety?)" of *Iolaus bowkeri*. In later years this butterfly has been associated and considered to be synonymous with *Stugeta subinfusata* Grünberg (or *St. bowkeri subinfusata*, as the taxon has usually been referred to) which, as indicated above, came originally from Windhoek, South West Africa. During the past year or two the present writer had had some misgivings about these insects being entirely synonymous — but was not convinced that this was not the case until Mr. Henning, in a recent letter, gave his own views and stated that, for various reasons, he believed they were not quite the same taxa. Specimens which he had seen, from South West Africa, and which evidently answered to nominate *subinfusata* in every respect, differed in certain details from the Little Namaqualand taxon. A number of the former specimens were subsequently sent to the writer for examination. Furthermore, Mr. R. I. Vane-Wright of the British Museum (Nat. Hist.) has himself kindly furnished very useful information concerning *subinfusata*, including a photostat copy of the original description in German — which was received by the writer through Mr. Henning.

It seems probable that a specimen taken by William Burchell in 1814 at "Chue Spring, on the Maadje Mountains" in Bechuanaland (now Botswana), which is in the remains of Burchell's collection in the University Museum, Oxford (*vide* Trimen, *op. cit.*), would correspond to the present *subinfusata*. In at least one of his important publications (or ones in conjunction with Bennett), Monsieur H. Stempffer has figured very accurately the valves of members of this group from various localities in Africa; and the "spines" and their disposition, at the distal end of the valves vary in accordance with the different taxa in a number of cases (*vide* Stempffer & Bennett, 1958. *Bull. Inst. fr. Afr. noire*, Sér. (A): 1264-5, figs. 13-15).

The other two insects included in the present paper are both from the Transvaal. The first of these seems only to have been found in the more southern portion of the Province, apart from two known captures (by K. M. Pennington and an unspecified collector) in the Orange Free State. The second is not apparently found so far to the south (these butterflies are not, of course, known to be sympatric), but it spreads widely through much of the rest of the Transvaal and enters adjoining territories such as Botswana and Rhodesia, and possibly extends still further to the north.

The question of the status which should be accorded to these latter two insects has been by no means easy to decide. It is nevertheless felt that, on balance, specific status would not be fully justified without entirely satisfactory evidence of this being likely — and with deference to M. Stempffer and



PLATE II

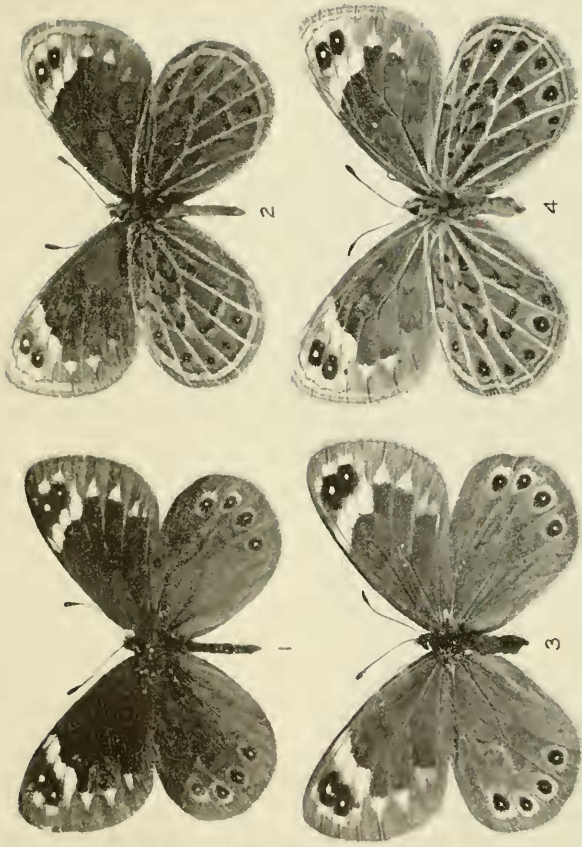


Photo: H. N. Wykeham

*Torynesis pringlei* spec. nov.  
Fig. 1. ♂ holotype (upper side). Fig. 2. ♂ holotype (underside).  
Fig. 3. ♀ allotype (upper side). Fig. 4. ♀ allotype (underside).  
Figures approximately natural size.

his rather conservative treatment of the group as a whole. If in either case specific status was found later to be more correct, such a change could then be made. Comparisons have been included in the first description concerned, hereunder, with both nominate *Stugeta bowkeri* and *St. subinfuscata subinfuscata*.

*Stugeta subinfuscata reynoldsi* subsp. nov.

#### Upperside

In both sexes this insect is of a full, rich violaceous — blue colour — i.e., in the case of genuinely fresh or unfaded specimens. Its general pattern, which includes the broad black bordering and other prominent black marking of the forewing, in conjunction with smaller white (or some times partly bluish-white) marking, and, in the hindwing, a black apical patch, is on the whole of a more clear-cut and striking form than in nominate *Stugeta bowkeri* itself. (The ♂ holotype happens to have the white marking much better developed than in the allotype ♀.)

#### Underside

The general colouring of the hindwing (and, in the darker-marked examples, the forewing also) is grey to brownish-grey, with alternating white or whitish areas present in the forewing (basal, medial and postmedial); and, in the hindwing, a white transverse band beyond middle. Less heavily marked specimens have the white portions of the forewing expanded sufficiently to form the more general colour of the wing. On the hindwing, and especially in the female, the area from the base to the dark, discal transverse band (not always clearly defined inwardly as such) is frequently of a lighter grey, owing to a suffusion, here, of white scaling; while the distal borders of all wings are less dark than the other definitely defined dark portions of the wings.

At first glance this insect may not look very different from examples of *St. subinfuscata subinfuscata*, but a number of differences, in detail, have been observed and, it is believed, warrant its recognition as a separate race. The blue of the upperside in the specimens that have been examined has been deeper than in ones of the latter taxon that have been used for comparison, especially in the males and, on the underside, the darkening in all wings has been more general, and particularly so in the males, of *reynoldsi*. Points of difference on the underside also include, in the hindwing, in *reynoldsi*, the less well-defined tracery of thin dark marking in the area from the base to the medial dark transverse band or streak; and the less noticeable constriction in about the middle of the post-medial white band. Specimens of *reynoldsi* that have been caught 11 miles north of Kamieskroon have shown a less full development of the underside dark marking.

Length of forewing: male, 14.5-16.5 mm. (the former measurement, in holotype); female, 16.0-18.25 mm. (16.25 mm. in allotype).

Specimens show some variation, as would be expected, in the size of the white upperside markings. The underside varies as regards the depth of the darker areas as well as, within limits, their extent.

This taxon (as well as the nominate race of *subinfuscata*) can be separated very easily from other species that have been studied, by the valves of the male genitalia, which are of the form figured by Stempffer (*op. cit.*, fig. 15), of another Springbok specimen, referred to as *Stugeta bowkeri subinfuscata* (and which the writer has found to be quite the same as in the nominate race from South West Africa). The valve has the second acute spine at its distal end much further removed from the first one, than in other Southern African taxa which have been examined, and is also more inwardly deflected (but this deflection is certainly more apparent in specimens that have dried out after dissection). The small size of the valve is very apparent in *reynoldsi* (and the nominate race).

♂ Holotype, WESTERN CAPE PROVINCE: 17 miles N. of Springbok, 8.XII.1977 (I. Bampton); British Museum Reg. No. Rh. 18682.

♀ Allotype, W. CAPE PROVINCE: data as for holotype: British Museum Reg. No. Rh. 18683.

Paratypes in author's collection: as holotype, mid-September, 1950, two ♀♀ (Col. H. C. Bridges). Eleven miles N. of Kamieskroon, C.P., 2.IX.1962, 1 ♀; 27.IX.1962, two ♂♂ (C. G. C. Dickson).

Paratype in Coll. C. W. Wykeham, loc. as above, 27.IX.1962, one ♀ (C. W. Wykeham).

Paratypes in Coll. W. H. Henning: 17 miles N. of Springbok, C.P., 30.XI.1974, three ♀♀; 4.XII.1974, one ♂ (I. Bampton).

Paratype in Coll. W. Teare: O'okiep, C.P., 16.XI.1978, one ♂ (W.T.).

Paratype in Coll. National Museum, Bulawayo, Rhodesia: Springbok, 3,000 ft., 20.XI.1938, one ♂ (R. C. Wood).

Paratype in Coll. South African Museum: data on one side of label — "Cape. Namaqualand. Springbokfontein [now Springbok];" data on other side of label — "G.A.R. [G. A. Reynolds]. 1873. Matjes-kloof;" one female. (Specimen examined through the courtesy of Dr. V. B. Whitehead and Mr. A. J. Prins of the Entomological Dept. of above museum.)

Paratypes in Coll. Transvaal Museum: Braki. Richtersveld, C.P., 15.XI.1933, one male (G. van Son). Profadder, C.P., 12.X.1946, two males (K. M. Pennington). Springbok, C.P., 4.X.1955, one male, 6.X.1955, one male (H. Cookson). Three miles S. of Garies, C.P., 10.IV.1965, one male (R. C. Littlewood).

It is interesting to note that specimens from the Rua Cana Falls, South West Africa, taken by Mr. C. W. Wykeham in June, 1977, have lost or largely lost (at least in the hindwings) the infuscation so characteristic, on the underside, of *subinfuscata*, although having the same disposition of the spines on the valves.